

Brookhaven National Laboratory
WILDLIFE MANAGEMENT PLAN
FY2000 ANNUAL SUMMARY REPORT

1.0 Introduction

It is the policy of Brookhaven National Laboratory (BNL) to integrate environmental stewardship into all facets of the Laboratory's missions. BNL is committed to managing all programs in a manner that protects the ecosystem. The present Wildlife Management Plan (WMP) was developed and implemented to address wildlife related management issues, including threatened and endangered species, deer overpopulation, habitat protection and enhancement, and informational needs related to wildlife management. The plan was limited in scope to the immediate needs identified at the time it was originated. Over the past year, additional management needs have been identified for inclusion in the WMP. As a result, BNL intends to expand the scope of the wildlife management program and develop a comprehensive Natural Resource Management Plan (NRMP) that uses an ecosystem-based approach to management of all natural resources onsite.

2.0 Comprehensive Natural Resources Management Plan

The current Wildlife Management Plan should be incorporated into a comprehensive Natural Resources Management Plan (NRMP) that addresses all natural resource management issues for the entire BNL Site. This conversion will require the development of several new sections and significant revisions to existing sections. The comprehensive plan structure. The comprehensive plan structure will be compatible with the regional management plan (methodologies and goals) currently under development by the Central Pine Barrens Protected Lands Council. The conversion will require extensive review both internally and externally to BNL. Internal review will be needed by all affected Laboratory organizations, including the Plant Engineering, Emergency Services (Fire Protection), Environmental Restoration, and Environmental Science divisions. External review may include the U.S. Environmental Protection Agency (EPA), the New York State Department of Environmental Conservation (NYSDEC), and the Central Pine Barrens Protected Lands Council.

The NRMP will include the basis for the plan, as well as goals, implementation actions, and evaluation criteria for the various components of the plan. The components of the existing Wildlife Management Plan will be retained with modifications. New sections to be developed include

- management of threatened and endangered species,
- management of feral animals,
- control of invasive species,
- integration of cultural resource management,

- prescribed burns,
- environmentally friendly/green landscaping,
- management of resident Canada goose populations,
- natural resource protection prioritized areas,
- biological monitoring needs,
- identification of baseline data gaps, and
- compatible recreational uses of the Laboratory site.

In the process of developing the NRMP, additional management concerns may be identified and incorporated.

BNL is currently drafting a Master Plan that will guide the continued development of the Laboratory. Included in the Master Plan is a Sustainable Development zoning approach for the protection of the Laboratory environment. The zoning approach identifies zones by desirability for either development or protection. As the zoning approach is developed, it will be incorporated into the NRMP. The Laboratory has also proposed the establishment of an Environmental Research and Protection Area. The management of this proposed area would also be incorporated within the NRMP.

3.0 Progress and Proposed Changes

The final version of the Wildlife Management Plan was issued in September 1999. Minor changes were incorporated in March 2000, and an addendum listing threatened, endangered, and species of special concern was added in June 2000. Progress in implementing the plan is evaluated by the metrics and action items listed in Attachment C of the plan.

The list below describes the progress made on the corresponding action items in Attachment C. FY2001 updates to action items are discussed after each progress statement.

3.1 Monthly Progress Reports.

Monthly Progress reports were submitted to the Environmental Services Division (ESD) Manager through June 2000.

- *Progress reports will be changed to a quarterly schedule and provided to the ESD Manager and the DOE point of contact.*

3.2 Annual Summary Report FY1999.

The 1999 Annual Summary Report was submitted September 30, 1999. This report is submitted for FY2000.

- *The submission date for the annual summary report will be changed to March 1 to reflect calendar year rather than fiscal year documentation. Calendar year summaries will facilitate inclusion of information in the annual Site Environmental Reports.*

3.3 Tiger Salamander Surveys.

In cooperation with NYSDEC, egg mass surveys were completed in March and April 2000. Egg masses or presence of adults were identified in 12 locations, which increased the number of confirmed sites from 14 to 16. Confirmed locations were TS-1, TS-5, TS-6, TS-7, TS-8, TS-10, TS-W3, TS-W4, TS-A7, TS-15, ts-W6a, and ditch feeding ts-A6a-c. Sites that had no egg masses or adults included TS-2, ts-3, ts-4, TS-9, ts-W2, ts-14, ts-11, ts-A4, TS-W6b, TS-13, ts-12, and ts-7. TS-2, TS-9, TS-W6b and TS-13 had previously been identified as confirmed tiger salamander breeding areas.

The first complete larval surveys were conducted in July 2000. All ponds that had either egg masses or adults present in the spring 2000 surveys were seined for presence of larvae. Larvae were confirmed at ponds TS-1, TS-6, TS-7, and TS-8. A total of 48 larvae were seen or captured. No larvae were found at the following ponds either due to the pond having dried between the spring and summer surveys, unsuccessful capture of larvae (but may be present), or a lack of egg masses having been deposited: TS-2, TS-5, ts-W6a, TS-A7, TS-10, TS-15, TS-W3, and ditch feeding ts-A6a-c.

- *No Change is presently needed regarding tiger salamander surveys. Surveys will continue as currently planned.*

3.4 Peconic River Monitoring.

Monitoring for continuous flow and water quality continues to be accomplished as required by BNL's State Pollutant Discharge Elimination System Permit.

- *No changes are needed in this action item.*

3.5 Peconic River Fish Sampling.

Routine fish sampling from the Peconic River is scheduled for August 2000. Surveys for banded sunfish are scheduled for late August/early September 2000.

- *This action item will be split into two separate items to address fish sampling related to environmental monitoring requirements, and banded sunfish surveys designed to evaluate banded sunfish population status.*

3.6 Education.

BNL-sponsored events during the week leading up to Earth Day included nature walks and bird watching field trips. The bird watching field trips were conducted in cooperation with the Moriches Bay Audubon Society and hosted 39 guests. Thirty-five species of birds were observed.

BNL developed and maintains a Natural Resources webpage as a public educational tool. A visiting student from the Energy Research Undergraduate Laboratory Fellowships program created the webpage. It describes the known BNL wildlife resources and includes the BNL birdlist, plant list, reptiles and amphibians, and list of mammals. The webpage also provides information on the existing Wildlife Management Plan and the New York State Department of Health Services' assessment on cesium contamination in deer. The webpage was introduced during the Earth Day events and went online in June 2000. The webpage may be accessed at <<http://www.esh.bnl.gov/wildlife/>>.

- *The natural resources webpage will be added to this action item and will include regular updates.*

3.7 TS-1, TS-2, TS-7 and TS-W3: Attachments for Egg Masses.

Review of these ponds during the tiger salamander larval survey carried out in July 2000 identified adequate natural egg mass attachment sites existing within these ponds. Egg mass attachment sites should persist through the winter months and be available for the spring 2001 breeding cycle.

- *This action item will be changed to assess need for attachment sites in the ponds listed above.*

3.8 TS-10 Excavation to allow Retention of Water.

No action occurred regarding the excavation of TS-10 basin to improve water retention for salamander habitat.

- *This action item must be re-evaluated as excavation may actually result in the retention of less water unless the excavated area is sealed to reduce or prevent the existing rapid recharge to groundwater.*

3.9 TS-2: Institute Security Patrol of Area.

This pond was in relatively good condition during the summer of 2000. If the pond dries out, problems with off-road vehicles may become a problem.

- *This action item will be changed to require periodic monitoring of the pond area and development of alternatives for control of off-road vehicles should the need arise.*

3.10 Bird Nests.

Twenty-six (26) new bluebird boxes were established around the biology fields research area and elsewhere around the site during the spring and summer of 2000. The boxes are monitored using a modified protocol established by the North American Bluebird Society. They are inspected several times during the nesting season to determine species usage and reproductive success, and to clean the boxes to mitigate impacts caused by parasites. Many of these boxes were used for nesting by eastern bluebirds and house wrens.

- *Data on success will be compiled in November 2000 after the nesting season and the last box inspection is complete.*

3.11 Turkey Sighting Reports.

Turkey sightings continue to be recorded and periodically reported to NYSDEC.

- *No change in this action item is needed.*

3.12 Deer Population Estimation and Control.

A population estimate is needed prior to making any decision to reduce the deer population. A search for contracted expertise in this field is ongoing. NYSDEC has hired a new deer biologist filling the vacancy left by Mark Lowery.

- *Discussions with this individual (Gary Hoke) will resume this fall.*

3.13 Wildlife Management Plan Update.

An addendum for inclusion of threatened, endangered, and species of special concern was developed and included in the WMP in June 2000.

- *Recommendations for conversion of the WMP into a comprehensive Natural Resources Management Plan, with required management sections, are presented in section 2.0 of this Annual Summary Report.*

3.14 Remediation of TS-W4, TS-W6b, and OU V.

Actions have not been initiated.

- *Remediation of TS-W6b is included in the remediation of the Old Hazardous Waste Facility. Peconic River remediation alternatives continue to be discussed.*

3.15 Songbird Surveys.

Songbird surveys were initiated in May 2000. Two transects were established in May 2000, with two additional transects established in June 2000. A fifth transect was added in July 2000. All five transects will be monitored annually (weather permitting) from March through October. The data will be used to monitor ecosystem health. The monitoring will be supplemented by songbird reports received via the BNL Natural Resources webpage.

- *This action item will be modified to include a reporting form on the Natural Resources webpage.*

3.16 Tiger salamander Breeding Pond Survey.

The need, scope, and feasibility of this study must be re-evaluated.

- *If the study is necessary, it will be designed using standardized methods for amphibian surveys.*

3/17 RHIC Revegetation.

The RHIC Revegetation Plan has been approved and submitted through the Activity Data Sheet (ADS) budget process. Limited funding for FY2001 (50K) is proposed. Implementation is pending funding.

- *No changes are needed at this time.*